

Penta Wood BRATS  
8/27/15  
(99)

**Richard, Philip E - DNR**

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**From:** Ree, Timothy <Tim.Ree@ghd.com>  
**Sent:** Wednesday, August 26, 2015 2:43 PM  
**To:** Richard, Philip E - DNR  
**Cc:** Frehner, Ron; Storlie, Pete  
**Subject:** Penta Wood - WPDES Compliance Sampling 8/17/2015 ~COR-086165~  
**Attachments:** Lab Report-240-54422-1-086165-02-07-2015-08-26.pdf

Phil,

Please find attached the results for the effluent sample collected at the Penta Wood site on 8/17/2015. PCP was detected in the effluent at a concentration of 0.096 ug/L (estimated), which is below the permit criteria of 0.1 ug/L.

Please update Kathy Bartilson (WDNR) and Linda Martin (USEPA).

Regards,

**Tim Ree**

**GHD**

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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Canton  
4101 Shuffel Street NW  
North Canton, OH 44720  
Tel: (330)497-9396

TestAmerica Job ID: 240-54422-1

Client Project/Site: 86165-01-01, Penta Wood

For:

GHD Services Inc.  
1801 Old Highway 8 NW  
Suite 114  
St. Paul, Minnesota 55112

Attn: Mr. Grant Anderson



Authorized for release by:  
8/26/2015 3:16:26 PM

Denise Heckler, Project Manager II  
(330)966-9477  
[denise.heckler@testamericainc.com](mailto:denise.heckler@testamericainc.com)

### LINKS

Review your project  
results through

Total Access

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? Ask  
The  
Expert

Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Definitions/Glossary

Client: GHD Services Inc.  
Project/Site: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-54422-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
J	Reported value was between the limit of detection and the limit of quantitation.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Case Narrative

Client: GHD Services Inc.  
Project/Site: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-54422-1

**Job ID: 240-54422-1**

**Laboratory: TestAmerica Canton**

**Narrative**

## CASE NARRATIVE

**Client: GHD Services Inc.**

**Project: 86165-01-01, Penta Wood**

**Report Number: 240-54422-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

### RECEIPT

The samples were received on 08/18/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.4 C.

### CHLORINATED HERBICIDES

Sample W-150817-TB-WE (240-54422-1) was analyzed for chlorinated herbicides in accordance with EPA SW-846 Method 8151A. The samples were prepared on 08/19/2015 and analyzed on 08/25/2015.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 180-151239.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



# Method Summary

Client: GHD Services Inc.  
Project/Site: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-54422-1

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Method	Method Description	Protocol	Laboratory
8151A	Herbicides (GC)	SW846	TAL PIT

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**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058



# Sample Summary

Client: GHD Services Inc.  
Project/Site: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-54422-1

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-54422-1	W-150817-TB-WE	Water	08/17/15 14:00	08/18/15 09:20

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# Detection Summary

Client: GHD Services Inc.  
Project/Site: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-54422-1

**Client Sample ID: W-150817-TB-WE**

**Lab Sample ID: 240-54422-1**

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Pentachlorophenol	0.096	J	0.097	0.015	ug/L	4		8151A	Total/NA

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This Detection Summary does not include radiochemical test results.

TestAmerica Canton



# Client Sample Results

Client: GHD Services Inc.  
 Project/Site: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-54422-1

**Client Sample ID: W-150817-TB-WE**

**Lab Sample ID: 240-54422-1**

Date Collected: 08/17/15 14:00

Matrix: Water

Date Received: 08/18/15 09:20

**Method: 8151A - Herbicides (GC)**

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.096	J	0.097	0.015	ug/L		08/19/15 16:10	08/25/15 03:37	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	63		32 - 140				08/19/15 16:10	08/25/15 03:37	4

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# Surrogate Summary

Client: GHD Services Inc.  
Project/Site: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-54422-1

## Method: 8151A - Herbicides (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCPA1 (32-140)	DCPA2 (32-140)
240-54422-1	W-150817-TB-WE	63	54
LCS 180-151239/2-A	Lab Control Sample	71	60
LCSD 180-151239/3-A	Lab Control Sample Dup	92	80
MB 180-151239/1-A	Method Blank	59	54

### Surrogate Legend

DCPA = 2,4-Dichlorophenylacetic acid



# QC Sample Results

Client: GHD Services Inc.  
Project/Site: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-54422-1

## Method: 8151A - Herbicides (GC)

**Lab Sample ID: MB 180-151239/1-A**  
**Matrix: Water**  
**Analysis Batch: 151608**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 151239**

Analyte	MB MB		LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Pentachlorophenol	<0.016		0.10	0.016	ug/L		08/19/15 16:10	08/25/15 03:13	4
Surrogate	MB MB		Limits			Prepared	Analyzed	Dil Fac	
%Recovery	Qualifier								
2,4-Dichlorophenylacetic acid	59		32 - 140			08/19/15 16:10	08/25/15 03:13	4	

**Lab Sample ID: LCS 180-151239/2-A**  
**Matrix: Water**  
**Analysis Batch: 151608**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 151239**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Pentachlorophenol	5.00	4.12		ug/L		82	40 - 140
Surrogate	LCS LCS		Limits			%Rec.	
%Recovery	Qualifier						
2,4-Dichlorophenylacetic acid	71		32 - 140				

**Lab Sample ID: LCSD 180-151239/3-A**  
**Matrix: Water**  
**Analysis Batch: 151608**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 151239**

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	Limits	RPD	Limit
		Result	Qualifier						
Pentachlorophenol	5.00	5.27		ug/L		105	40 - 140	23	30
Surrogate	LCSD LCSD		Limits			%Rec.			
%Recovery	Qualifier								
2,4-Dichlorophenylacetic acid	92		32 - 140						

# QC Association Summary

Client: GHD Services Inc.  
Project/Site: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-54422-1

## GC Semi VOA

### Prep Batch: 151239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-54422-1	W-150817-TB-WE	Total/NA	Water	8151A	
LCS 180-151239/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 180-151239/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	
MB 180-151239/1-A	Method Blank	Total/NA	Water	8151A	

### Analysis Batch: 151608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-54422-1	W-150817-TB-WE	Total/NA	Water	8151A	151239
LCS 180-151239/2-A	Lab Control Sample	Total/NA	Water	8151A	151239
LCSD 180-151239/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	151239
MB 180-151239/1-A	Method Blank	Total/NA	Water	8151A	151239



# Lab Chronicle

Client: GHD Services Inc.  
Project/Site: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-54422-1

**Client Sample ID: W-150817-TB-WE**

**Lab Sample ID: 240-54422-1**

**Date Collected: 08/17/15 14:00**

**Matrix: Water**

**Date Received: 08/18/15 09:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			151239	08/19/15 16:10	CBY	TAL PIT
Total/NA	Analysis	8151A		4	151608	08/25/15 03:37	JMO	TAL PIT

**Laboratory References:**

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058



# Certification Summary

Client: GHD Services Inc.  
Project/Site: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-54422-1

## Laboratory: TestAmerica Canton

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	999518190	08-31-15 *

## Laboratory: TestAmerica Pittsburgh

The certifications listed below are applicable to this report.

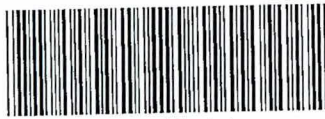
Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	998027800	08-31-15



\* Certification renewal pending - certification considered valid.

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**CHAIN OF CUSTODY  
AND  
RECEIVING DOCUMENTS**



240-54422 Chain of Custody



**CONESTOGA-ROVERS & ASSOCIATES**

# CHAIN OF CUSTODY RECORD

1801 Old Highway 8 Northwest, Suite 114

St. Paul, Minnesota 55112 United States

Phone: (651) 639-0913

Fax: (651) 639-0923

241634

COC NO. **SP-01645**

PAGE **1** OF **1**

(See Reverse Side for Instructions)

Project No/Phase/Task Code: <b>086165-02-07</b>				Laboratory Name: <b>TEST AMERICA</b>				Lab Location: <b>N. CANTON, OH</b>				SSOW ID:						
Project Name: <b>PENTAWOOD</b>				Lab Contact:				Lab Quote No:				Cooler No:						
Project Location: <b>SIREN, WI</b>				SAMPLE TYPE				CONTAINER QUANTITY & PRESERVATION				ANALYSIS REQUESTED (See Back of COC for Definitions)						
Chemistry Contact: <b>GRANT.ANDERSON@GHD.COM</b>				Matrix Code (see back of COC) Grab (G) or Comp (C) Unpreserved Hydrochloric Acid (HCl) Nitric Acid (HNO <sub>3</sub> ) Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> ) Sodium Hydroxide (NaOH) Methanol/Water (Soil VOC) EnCores 3x5-g, 1x25-g Other: Total Containers/Sample <b>PCR-8151</b>				MSMSD Request				Carrier:						
Sampler(s): <b>TIM BROWN</b>												Airbill No:						
Date Shipped:				COMMENTS/ SPECIAL INSTRUCTIONS:				Date Shipped:										
Item	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)			DATE (mm/dd/yy)	TIME (hh:mm)	Matrix Code	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO <sub>3</sub> )	Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	MSMSD Request	COMMENTS/ SPECIAL INSTRUCTIONS:
1	<b>W-150817-TB-WE</b>			<b>08/17/15</b>	<b>1400</b>	<b>W</b>	<b>G</b>	<b>2</b>								<b>2</b>	<b>X</b>	<b>* STANDARD TAT CONTACT GRANT ANDERSON *</b>
2																		
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4																		
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7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
TAT Required in business days (use separate COCs for different TATs):				Total Number of Containers: <b>2</b>				Notes/ Special Requirements:										
<input type="checkbox"/> 1 Day <input type="checkbox"/> 2 Days <input type="checkbox"/> 3 Days <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week <input checked="" type="checkbox"/> Other: <b>STANDARD</b>				All Samples in Cooler must be on COC														
RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE	TIME											
<b>Tim Brown</b>	<b>GHD</b>	<b>8/17/15</b>	<b>1500</b>	<b>Grant Anderson</b>	<b>TA-Canton</b>	<b>8/18/15</b>	<b>900</b>											

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT - ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE - Fully Executed Copy (CRA)

YELLOW - Receiving Laboratory Copy

PINK - Shipper

GOLDENROD - Sampling Crew

CRA Form: COC-10A (20110804)





TestAmerica Canton Sample Receipt Form/Narrative  
Canton Facility

Login # : 50012

Client GAD Site Name \_\_\_\_\_ Cooler unpacked by: \_\_\_\_\_  
Cooler Received on 8/18/15 Opened on 8/18/15  
FedEx: 1<sup>st</sup> Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other \_\_\_\_\_

Receipt After-hours: Drop-off Date/Time \_\_\_\_\_ Storage Location \_\_\_\_\_

TestAmerica Cooler # \_\_\_\_\_ Foam Box Client Cooler Box \_\_\_\_\_ Other \_\_\_\_\_  
Packing material used: Bubble Wrap Foam Plastic Bag None Other \_\_\_\_\_  
COOLANT: Wet Ice Blue Ice Dry Ice Water None

- Cooler temperature upon receipt  
 IR GUN# A (CF +1.0 °C) Observed Cooler Temp. 2.4 °C Corrected Cooler Temp. 3.4 °C  
 IR GUN# 4 (CF +0.5 °C) Observed Cooler Temp. \_\_\_\_\_ °C Corrected Cooler Temp. \_\_\_\_\_ °C  
 IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp. \_\_\_\_\_ °C Corrected Cooler Temp. \_\_\_\_\_ °C  
 IR GUN# 8 (CF -1.5 °C) Observed Cooler Temp. \_\_\_\_\_ °C Corrected Cooler Temp. \_\_\_\_\_ °C
- Were custody seals on the outside of the cooler(s)? If Yes Quantity 7 Yes No  
 -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA  
 -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
- Shippers' packing slip attached to the cooler(s)? Yes No
- Did custody papers accompany the sample(s)? Yes No
- Were the custody papers relinquished & signed in the appropriate place? Yes No
- Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
- Did all bottles arrive in good condition (Unbroken)? Yes No
- Could all bottle labels be reconciled with the COC? Yes No
- Were correct bottle(s) used for the test(s) indicated? Yes No
- Sufficient quantity received to perform indicated analyses? Yes No
- Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC432654
- Were VOAs on the COC? Yes No NA
- Were air bubbles >6 mm in any VOA vials? Yes No NA
- Was a trip blank present in the cooler(s)? Trip Blank Lot # \_\_\_\_\_ Yes No

See Multiple Cooler Form

Contacted PM \_\_\_\_\_ Date \_\_\_\_\_ by \_\_\_\_\_ via Verbal Voice Mail Other \_\_\_\_\_  
Concerning \_\_\_\_\_

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: \_\_\_\_\_

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\_\_\_\_\_

15. SAMPLE CONDITION  
 Sample(s) \_\_\_\_\_ were received after the recommended holding time had expired.  
 Sample(s) \_\_\_\_\_ were received in a broken container.  
 Sample(s) \_\_\_\_\_ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION  
 Sample(s) \_\_\_\_\_ were further preserved in the laboratory.  
 Time preserved: \_\_\_\_\_ Preservative(s) added/Lot number(s): \_\_\_\_\_

## Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 240-54422-1

**Login Number: 54422**  
**List Number: 2**  
**Creator: Watson, Debbie**

**List Source: TestAmerica Pittsburgh**  
**List Creation: 08/19/15 12:08 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

